






Name:

Date:

Class:

Engineering Design Report Scoring Rubric

Category / Rating	3 (excellent)	2	1 (failing)
Brainstormed Designs 	Students have at least three different designs from brainstorming. They provided sufficient descriptions of the designs and provided sufficient reasons for choosing the design they built for the prototype.	Students have at least three designs from brainstorming. They do not provide sufficient descriptions of the designs or reasons for choosing the design built as a prototype.	Students have fewer than three designs from brainstorming. They do not describe the designs in the report and do not give reasons for choosing the design built as a prototype.
Design Description 	Students provide a sketch and a full breakdown of the design and explain the reasons and usefulness of each portion of the water filtration system.	Students provide a sketch and a breakdown of portions of the water filtration system, but do not explain the purpose for all parts in the system.	Students provide a sketch of the water filtration system with labels. Little to no explanation is given for each.
Results 	Students provide a detailed description of the test and the results. They provide the time it takes for water to pass through the system, the volume of recovered water from the system compared to its beginning volume, and the remaining chlorine in the water.	Students provide most of the information related to their tests. They give an incomplete description of how the test was performed. They list some results such as chlorine remaining, however, leave out one or more details of the results.	Students provide results of the test. They do not provide the description on how the test was performed or details on the water recovered or time it takes for the water to pass through.
Analysis 	Students provide detailed analysis of the test results and give reasons and explanations for various design faults.	Students provide a short analysis of the experiment, but do not explain the reasoning for the design faults.	Students do not provide analysis of the results from the experiment.
Discussion / Redesign 	Students use their results and analysis to redesign the prototype thoughtfully and with purpose.	Students use their results to redesign the prototype. Reasoning for changes is not well explained.	Students provide a redesign of the prototype, but do not explain reasons for changes and do not use analysis of results as reasons for changes.
	Total Score [maximum of 15]		